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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/662,699	09/15/2003	Agne Swerin	IP 023445	1036

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EXAMINER

CHIN, PETER

ART UNIT PAPER NUMBER

1731

DATE MAILED: 12/17/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/662,699

Applicant(s)

SWERIN ET AL.

Examiner

Peter Chin

Art Unit

1731

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-26 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☐ Claim(s) ____ is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 15 September 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 12/15/03;8/9/04.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

DETAILED ACTION

1. Claims 1,4,5,7-14,16,19-21,23-26 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Sandstrom et al (6,379,497).

Sandstrom et al discloses a three layer single ply paper board. The central layer is a high bulk layer containing bulk enhancing additives such as microspheres, high bulk fibers (chemically treated) and other bulk enhancing additive, columns 6 and 21. Retention aids, binders, fillers are also disclosed in columns 34 and 35. The surface layer of the board is surface sized or coated with starch, polymer latex, epoxy resin, pigments, see columns 5,12,13,18,21, 31. The size or coating composition depends on the kind of article that the paperboard is used for. Claim 7: see column 7. Claim 11, the claimed crosslinking agent reads on epoxy disclosed and the chemically treated anfractuous or high bulk fibers (HBA fiber, column 21) in Sandstrom et al. If evidenced is necessary to show that chemically treated high bulk fiber is crosslinked cellulose fiber, see Norlander et al (6,537,680).

While Sandstrom does not explicitly state that the paperboard structure is an "I-beam" structure it inherently is due to the high bulk central layer and the denser strength outer layers. Thus, Sandstrom anticipates the claimed invention or at the least, Sandstrom obviously has the claimed "I-beam" structure. Note that if evidence is required, see Minton (5,244,541) who shows that the "I-beam" structure is a multiply/layer paperboard in which the center layer is a high bulk layer.

2. Claims 2,3,6,15,17,18 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sandstrom et al (6,379,497).

Claims 2,3,15,17 and 18: It would have been obvious to employ the claimed thickness and weights as it depends on the type of article or final product that the paperboard is intended for.

Claims 6 and 22: The use of the claimed diamide salt as the bulk enhancing additive in Sandstrom et al would have been obvious since it is a conventional and commercially available bulk enhancing additive as evidenced by page 6 of the instant specification.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Peter Chin whose telephone number is (571) 272-1186. The examiner can normally be reached on Monday through Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Steven Griffin can be reached on (571) 272-1189. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



PETER CHIN
PRIMARY EXAMINER